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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,212	03/27/2006	Masayuki Takeda	8013-1265	5185

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EXAMINER	
THOMAS, ERIC W	

ART UNIT	PAPER NUMBER
2831	

MAIL DATE	DELIVERY MODE
08/19/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/534,212	TAKEDA ET AL.	
	Examiner	Art Unit	
	Eric Thomas	2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3, 5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant is advised that the Notice of Allowance mailed 3/11/08 is vacated. If the issue fee has already been paid, applicant may request a refund or request that the fee be credited to a deposit account. However, applicant may wait until the application is either found allowable or held abandoned. If allowed, upon receipt of a new Notice of Allowance, applicant may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a specified Deposit Account.

2. The indicated allowability of claims 1-3, 5 is withdrawn in view of the newly discovered reference(s) to WO 02/101773 (US 7,072,173) and JP 11283874 (US 6962612). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a

later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being obvious over Takeda et al. (WO 02/101773) in view of Saito et al. (US 6,962,612).

Regarding claim 1, Takeda et al. disclose an electrolytic capacitor having a capacitor element fabricated by winding an anode foil (1), a cathode foil (2), and a separator (3) and impregnating the capacitor element with an electrolyte solution, an outer case for housing the capacitor element, and a sealing member for sealing an open part of the outer case, wherein an electrolyte solution containing aluminum tetrafluoride salt (abstract) is used as said electrolyte solution, and a separator made of a heat resistant synthetic resin (col. 10 lines 13-15).

Takeda et al. disclose the claimed invention except that the sealing member comprises a partial cross-linking peroxide butyl rubber that is added as a cross-linking agent to a copolymer of isobutylene, isoprene, and divinylbenzene.

Saito et al. teach the use of a sealing member (see col. 9 lines 24-35 & col. 10 - sealing member A) that is used in an electrolytic capacitor, wherein the sealing member comprises a partial cross-linking peroxide butyl rubber agent (dicumyl peroxide) that was added to a copolymer of isobutylene, isoprene, and divinyl benzene.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the sealing member of Takeda et al. with the sealing material of Saito et al., since such a modification would form a sealing member that is resistant to electrolyte leakage.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. (WO 02/101773) in view of Saito et al. (US 6,962,612) and JP 2000173864 ('864).

Takeda et al. disclose an electrolytic capacitor having a capacitor element fabricated by winding an anode foil (1), a cathode foil (2), and a separator (3) and impregnating the capacitor element with an electrolyte solution, an outer case for housing the capacitor element, and a sealing member for sealing an open part of the outer case, wherein that an electrolyte solution containing aluminum tetrafluoride salt (abstract) is used as said electrolyte solution.

Takeda et al. disclose the claimed invention except that the sealing member comprises a partial cross-linking peroxide butyl rubber that is added as a cross-linking agent to a copolymer of isobutylene, isoprene, and divinylbenzene and the separator is a mixed paper containing glass fiber.

Saito et al. teach the use of a sealing member (see col. 9 lines 24-35 & col. 10 - sealing member A) that is used in an electrolytic capacitor, wherein the sealing member comprises a partial cross-linking peroxide butyl rubber agent (dicumyl peroxide) that was added to a copolymer of isobutylene, isoprene, and divinyl benzene.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the sealing member of Takeda et al. with the sealing material of Saito et al., since such a modification would form a sealing member that is resistant to electrolyte leakage.

'864 teaches the use of an improved separator used in an electrolytic capacitor.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the capacitor of '953 using the separator of '864, since such a modification would improve the electrical properties of the capacitor.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. (WO 02/101773), Saito et al. (US 6,962,612) and JP 2000173864 ('864) as applied to claim 2 above, and further in view of Arora et al. (RE 31,743).

Takeda et al. disclose the claimed invention except that the anode or cathode foil being subjected to a phosphate treatment.

Arora et al. teach that treating an aluminum foil with a phosphate treatment produces an uniform etched structure.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to treat the anode and cathode foils with a phosphate etch treatment, since such a modification would uniformly etch the anode and cathode foils.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. (WO 02/101773) and Saito et al. (US 6,962,612) as applied to claim 1 above, and further in view of Arora et al. (RE 31,743).

Takeda et al. disclose the claimed invention except that the anode or cathode foil being subjected to a phosphate treatment.

Arora et al. teach that treating an aluminum foil with a phosphate treatment produces an uniform etched structure.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to treat the anode and cathode foils with a phosphate etch treatment, since such a modification would uniformly etch the anode and cathode foils.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an

invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 20 of U.S. Patent No. 7,072,173 in view of Saito et al. (US 6,962,612).

'173 discloses in claim 20, an electrolytic capacitor comprising a capacitor element fabricated by winding an anode foil, a cathode foil and a separator; and an electrolyte solution containing aluminum tetrafluoride salt.

'173 discloses the claimed invention except that the separator is formed from a heat resistant synthetic resin and a sealing member that is formed of a partial cross-linking peroxide that is added as cross-linking agent to a butyl rubber polymer comprising a copolymer of isobutylene, isoprene, and divinylbenzene.

Saito et al. teach the use of a sealing member (see col. 9 lines 24-35 & col. 10 - sealing member A) that is used in an electrolytic capacitor, wherein the sealing member comprises a partial cross-linking peroxide butyl rubber agent (dicumyl peroxide) that was added to a copolymer of isobutylene, isoprene, and divinyl benzene.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the sealing member of '173 with the sealing material of Saito et al., since such a modification would form a sealing member that is resistant to electrolyte leakage.

Polyethylene (heat resistant material) is a well known material used in the formation of separators for electrolytic capacitors.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the separator of '173 with heat resistant material (polyethylene), since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

11. Claim 2 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 20 of U.S. Patent No. 7,072,173 in view of Saito et al. (US 6,962,612) and JP 2000173864 ('864).

'173 discloses in claim 20, an electrolytic capacitor comprising a capacitor element fabricated by winding an anode foil, a cathode foil and a separator, and an electrolyte solution containing aluminum tetrafluoride salt.

'173 discloses the claimed invention except that the separator is formed from a mixed paper containing glass fiber and a sealing member that is formed of a partial cross-linking peroxide which is added as a cross-linking agent to a butyl rubber polymer comprising a copolymer of isobutylene, isoprene, and divinylbenzene.

Saito et al. teach the use of a sealing member (see col. 9 lines 24-35 & col. 10 - sealing member A) that is used in an electrolytic capacitor, wherein the sealing member comprises a partial cross-linking peroxide butyl rubber agent (dicumyl peroxide) that was added to a copolymer of isobutylene, isoprene, and divinyl benzene.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the sealing member of '173 with the sealing material of Saito et al., since such a modification would form a sealing member that is resistant to electrolyte leakage.

'864 teaches the use of an improved separator used in an electrolytic capacitor wherein the separator comprises a mixed paper containing glass fiber.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the capacitor of '953 using the separator of '864, since such a modification would improve the electrical properties of the capacitor.

12. Claim 3 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 20 of U.S. Patent No. 7,072,173 in view of Saito et al. (US 6,962,612) , JP 2000173864 ('864) and Arora et al. (RE 31,743).

'173 discloses the claimed invention except that the anode or cathode foil being subjected to a phosphate treatment.

Arora et al. teach that treating an aluminum foil with a phosphate treatment produces an uniform etched structure.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to treat the anode and cathode foils with a phosphate etch treatment, since such a modification would uniformly etch the anode and cathode foils.

13. Claim 5 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 20 of U.S. Patent No. 7,072,173 in view of Saito et al. (US 6,962,612) and Arora et al. (RE 31,743).

'173 discloses the claimed invention except that the anode or cathode foil being subjected to a phosphate treatment.

Arora et al. teach that treating an aluminum foil with a phosphate treatment produces an uniform etched structure.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to treat the anode and cathode foils with a phosphate etch treatment, since such a modification would uniformly etch the anode and cathode foils.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Thomas whose telephone number is 571-272-1985. The examiner can normally be reached on Monday - Friday 5:30 AM - 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric Thomas/
Primary Examiner, Art Unit 2831